

FORM PTO-1390 (Modified)  
(REV. 07-2004)

U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE

ATTORNEY'S DOCKET NUMBER

2002JP309

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

NOT ASSIGNED 104518105

INTERNATIONAL APPLICATION NO.

PCT/JP03/07354

INTERNATIONAL FILING DATE

June 10, 2003

PRIORITY DATE CLAIMED

June 21, 2002

TITLE OF INVENTION

PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME

APPLICANT(S) FOR DO/EO/US

Yasushi AKIYAMA, Yusuke TAKANO, Kiyohisa TAKAHASHI, Sung-Eun HONG, Tetsuo OKAYASU

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. EV 540353265 US
23. ☒ Other items or information:

Form PCT/IB/301

WO 2004/001510 A1

Form PCT/IB/304

Form PCT/IB/308

U.S. APPLICATION NO (if known, see 37 CFR 1.51) <b>NOT ASSIGNED 105</b>		INTERNATIONAL APPLICATION NO. <b>PCT/JP03/07354</b>		ATTORNEY'S DOCKET NUMBER <b>2002JP309</b>	
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24. The following fees are submitted:

BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)) :				CALCULATIONS PTO USE ONLY	
<input type="checkbox"/>	Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO .....	\$1110.00			
<input checked="" type="checkbox"/>	International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .....	<del>\$950.00</del>			
<input type="checkbox"/>	International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO .....	\$790.00			
<input type="checkbox"/>	International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) .....	\$750.00			
<input type="checkbox"/>	International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) .....	\$100.00			
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>			<b>\$1,000.00</b>		
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			<b>\$0.00</b>		
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	2 - 20 =	0	x \$18.00	<b>\$0.00</b>	
Independent claims	2 - 3 =	0	x \$88.00	<b>\$0.00</b>	
Multiple Dependent Claims (check if applicable).			<input type="checkbox"/>	<b>\$0.00</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$1,000.00</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				<b>\$0.00</b>	
<b>SUBTOTAL =</b>				<b>\$1,000.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	<b>\$0.00</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$1,000.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).			<input type="checkbox"/>	<b>\$0.00</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$1,000.00</b>	
				Amount to be: refunded	\$
				charged	\$

a. ☐ A check in the amount of \_\_\_\_\_ to cover the above fees is enclosed.

b. ☒ Please charge my Deposit Account No. 50-3309 in the amount of \$1,000.00 to cover the above fees.

c. ☒ The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-3309


d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

**ALAN P. KASS**  
**AZ ELECTRONIC MATERIALS USA CORP.**  
**70 MEISTER AVENUE**  
**SOMERVILLE, NJ 08876**

Customer No. 26,289

  
 SIGNATURE

**ALAN P. KASS**  
 NAME

**32142**  
 REGISTRATION NUMBER

**December 10, 2004**  
 DATE

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Yasushi AKIYAMA et al.

Docket No.

2002JP309

Application No.  
NOT ASSIGNEDFiling Date  
December 10, 2004Examiner  
NOT ASSIGNEDCustomer No.  
26,289Group Art Unit  
NOT ASSIGNEDInvention: **PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME**

I hereby certify that the following correspondence:

WO 2004/001510 A1 - 1 Page

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

December 10, 2004*(Date)*MARIA T. SANCHEZ*(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EV 540353265 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

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NOT ASSIGNEDInvention: **PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME**

I hereby certify that the following correspondence:

**Notice Informing The Applicant Of The Communication Of the International Application  
To The Designated Offices (Form PCT/ISA/308) - 1 Page***(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

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*(Signature of Person Mailing Correspondence)*EV 540353265 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

10/518105

DT12 Rec'd PCT/PTO 10 DEC 2004

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Yasushi AKIYAMA et al.

Docket No.

2002JP309

Application No. <b>NOT ASSIGNED</b>	Filing Date <b>December 10, 2004</b>	Examiner <b>NOT ASSIGNED</b>	Customer No. <b>26,289</b>	Group Art Unit <b>NOT ASSIGNED</b>
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Invention: **PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME**

I hereby certify that the following correspondence:

**Notification Concerning Submission Or Transmittal Of Priority Document (Form PCT/ISA/304) - 1 Page**

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

December 10, 2004

*(Date)*

**MARIA T. SANCHEZ**

*(Typed or Printed Name of Person Mailing Correspondence)*

  
*(Signature of Person Mailing Correspondence)*

**EV 540353265 US**

*("Express Mail" Mailing Label Number)*

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Application No.  
**NOT ASSIGNED**

Filing Date  
**December 10, 2004**

Examiner  
**NOT ASSIGNED**

Customer No.  
**26,289**

Group Art Unit  
**NOT ASSIGNED**

Invention: **PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION FOR USE IN THE SAME**

I hereby certify that the following correspondence:

**Notification Of Receipt Of Record Copy (Form PCT/ISA/301) - 2 Pages**

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

**December 10, 2004**

*(Date)*

**MARIA T. SANCHEZ**

*(Typed or Printed Name of Person Mailing Correspondence)*

  
*(Signature of Person Mailing Correspondence)*

**EV 540353265 US**

*("Express Mail" Mailing Label Number)*

**Note: Each paper must have its own certificate of mailing.**

10/518105

DT12 Rec'd PCT/PTO 10 DEC 2004

**CERTIFICATE OF MAIL BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Yasushi AKIYAMA et al.

Docket No.

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Application No.  
NOT ASSIGNEDFiling Date  
December 10, 2004Examiner  
NOT ASSIGNEDCustomer No.  
26,289Group Art Unit  
NOT ASSIGNEDInvention: **PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME**


I hereby certify that the following correspondence:

International Search Report (Form PCT/ISA/210) - 2 Pages

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

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*(Signature of Person Mailing Correspondence)*EV 540353265 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b>			Docket No. <b>2002JP309</b>	
Applicant(s): <b>Yasushi AKIYAMA et al.</b>				
Application No. <b>NOT ASSIGNED</b>	Filing Date <b>December 10, 2004</b>	Examiner <b>NOT ASSIGNED</b>	Customer No. <b>26,289</b>	Group Art Unit <b>NOT ASSIGNED</b>
Invention: <b>PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION FOR USE IN THE SAME</b>				
I hereby certify that the following correspondence: <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"><b>Declaration For Utility Or Design Patent Application - 3 Pages</b></div> <p style="text-align: center;"><i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on</p> <p style="text-align: center;"><u><b>December 10, 2004</b></u> <i>(Date)</i></p> <div style="text-align: right; margin-right: 100px;"><p><b>MARIA T. SANCHEZ</b> <i>(Typed or Printed Name of Person Mailing Correspondence)</i></p><p> <i>(Signature of Person Mailing Correspondence)</i></p><p><b>EV 540353265 US</b> <i>("Express Mail" Mailing Label Number)</i></p></div>				
<b>Note: Each paper must have its own certificate of mailing.</b>				



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Applicant(s): Yasushi AKIYAMA et al.

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Examiner

NOT ASSIGNED

Customer No.

26,289

Group Art Unit

NOT ASSIGNED

Invention:

**PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION  
FOR USE IN THE SAME**


I hereby certify that the following correspondence:

Transmittal Letter - 2 Pages

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

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Application No. NOT ASSIGNED	Filing Date December 10, 2004	Examiner NOT ASSIGNED	Customer No. 26,289	Group Art Unit NOT ASSIGNED
Invention: <b>PROCESS FOR PREVENTING DEVELOPMENT DEFECT AND COMPOSITION FOR USE IN THE SAME</b>				
I hereby certify that the following correspondence:  <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"><b>Patent Application - 27 Pages</b></div> <i>(Identify type of correspondence)</i>  is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on  <div style="text-align: center;"><u>December 10, 2004</u> <i>(Date)</i></div> <div style="text-align: center;"><u>MARIA T. SANCHEZ</u> <i>(Typed or Printed Name of Person Mailing Correspondence)</i>   <i>(Signature of Person Mailing Correspondence)</i></div> <div style="text-align: center;"><u>EV 540353265 US</u> <i>("Express Mail" Mailing Label Number)</i></div>				
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